

# M M W R

## MORBIDITY AND MORTALITY WEEKLY REPORT

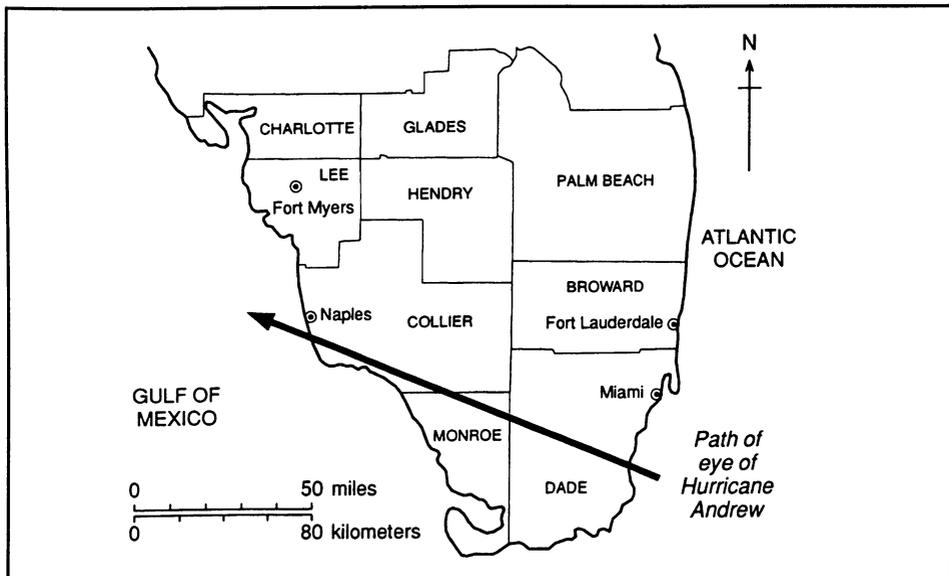
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### Epidemiologic Notes and Reports

#### **Preliminary Report: Medical Examiner Reports of Deaths Associated with Hurricane Andrew – Florida, August 1992**

On August 24, 1992, at 1:40 a.m. eastern daylight time (EDT), rain bands associated with Hurricane Andrew reached the eastern coast of Florida. At 4:45 a.m. EDT, Hurricane Andrew made landfall 35 miles southeast of Miami at Homestead, with sustained winds of 145 miles per hour (mph) and gusts of 164 mph. These winds extended 45 miles outward of the storm center. The storm moved across the state at 18 mph toward the Gulf of Mexico (Figure 1). The tidal surge on the eastern coast was

**FIGURE 1. Path of Hurricane Andrew – Florida, August 24, 1992**



*Hurricane Andrew – Continued*

estimated at 7–19 feet. During the storm, approximately 2.5 million Florida residents were left without electrical power, and approximately 56,000 family dwelling units were destroyed or severely damaged. This report presents preliminary data from Florida medical examiner (ME) offices about deaths attributed to Hurricane Andrew.

From August 26 through September 1, public health officials contacted staff in seven district ME offices in southern Florida to request information about hurricane-associated mortality. These seven districts comprise nine counties and have a total population of 4,765,675. The only district ME office to report deaths associated with the storm was District 11 (Dade County [1990 population: 1.9 million]).

As of September 1, the Dade County Medical Examiner Office reported receiving the bodies of 32 persons whose deaths were associated with Hurricane Andrew. Of these deaths, 14 were accidental\* deaths directly<sup>†</sup> associated with the storm (Table 1). Nine were caused by injuries resulting from blunt or penetrating trauma, four from asphyxia following the collapse of buildings, and one from drowning.

The remaining 18 deaths were indirectly<sup>‡</sup> associated with the hurricane. Of these deaths, 11 were from natural causes, five were from accidental causes, and two are pending further investigation. Of the 11 deaths from natural causes, eight were caused by stress-induced cardiovascular events, two were associated with organic brain syndrome, and one was caused by intracerebral hemorrhage in a pregnant woman. Of the five deaths from "accidental" causes, three were caused by blunt trauma associated with clean-up or falls from damaged buildings, and two were children who died in house fires.

In addition to the 32 known deaths, one person, who was on his boat during the preimpact phase of the storm, is officially missing and presumed dead after being washed overboard.

*Reported by: Medical examiner's offices in districts 11 (Dade County), 15 (Palm Beach County), 16 (Monroe County), 17 (Broward County), 20 (Collier County), 21 (Glades, Hendry, and Lee counties), 22 (Charlotte County); Florida Dept of Health and Rehabilitative Svcs. Surveillance and Programs Br and Disaster Assessment and Epidemiology Section, Health Studies Br, Div of Environmental Hazards and Health Effects, and Emergency Response Coordination Group, Office of the Director, National Center for Environmental Health; Div of Field Epidemiology, Epidemiology Program Office, CDC.*

**Editorial Note:** In Florida, most deaths directly attributed to Hurricane Andrew resulted from blunt trauma or asphyxia. In the past, hurricane-associated mortality has included high numbers of drownings (1). However, because of the minimal storm surge in the heavily populated areas, a building code that requires structures to withstand winds of 130 mph, and advanced warning systems and well-coordinated evacuation plans, drowning, as well as deaths from other causes, attributed to the

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\*"Accidental" is a medicolegal term that refers to the circumstance under which a death occurs. When a death occurs under "accidental" circumstances, the preferred term within the public health community is "unintentional injury."

<sup>†</sup>The ME office defined a directly associated death as a death caused by the environmental force of the hurricane. Therefore, all these deaths occurred during the preimpact or impact phases of the storm.

<sup>‡</sup>An indirect death was defined as a death caused by hurricane-related events, such as evacuation, clean-up, inability to obtain medication, loss of electricity, or stress-induced cardiovascular events.

*Hurricane Andrew – Continued*

hurricane remained relatively low. Nonetheless, some persons refused to evacuate their homes, and the deaths directly associated with Hurricane Andrew in Florida occurred among such persons. Public health and emergency management agencies need to continue to emphasize the importance of timely evacuation during natural disasters.

Most of the deaths associated with Hurricane Hugo, which struck Puerto Rico and South Carolina in September 1989, occurred in the postimpact phase and included deaths from electrocutions due to contact with energized power lines and the use of portable electric generators; house fires caused by candles used for lighting; and traumatic injuries sustained during clean-up (2,3). Two deaths associated with fires have already occurred in the postimpact phase of Hurricane Andrew. The public and relief workers should be aware of these and other potential dangers during the postimpact, clean-up phase of the hurricane and take appropriate precautions.

**TABLE 1. Deaths\* directly attributed to Hurricane Andrew – August 1992**

Decedent age (yrs)	Race	Sex	Cause of death	Circumstance of death
47	Black	Male	Asphyxia due to chest compression	Tree fell on camper
12	White	Female	Blunt head trauma	Struck by beam from roof while in her home
25	White	Male	Massive head trauma	Roof of home caved in
74	White	Male	Multiple injuries	Truck trailer without wheels (being used as a shelter) rolled over and collapsed (11 others survived)
49	White	Male	Craniocerebral trauma	
32	White	Male	Drowning	Aboard anchored boat at time of storm; later found floating in canal
62	White	Male	Mechanical asphyxia	Trailer collapsed and rolled over
67	White	Male	Positional asphyxia	Trapped under debris from ceiling that collapsed
80	White	Female	Mechanical asphyxia	Refused evacuation; buried under debris when trailer collapsed
46	White	Male	Multiple blunt trauma	Found in residence destroyed by storm
49	White	Male	Multiple blunt trauma	Left home when it began to collapse; killed by flying debris outside home
67	White	Female	Multiple penetrating injuries	Townhouse collapsed
54	White	Male	Multiple blunt trauma	Roof collapsed
37	White	Male	Blunt craniocerebral trauma	Struck by flying object aboard boat, and fell overboard during storm; later washed ashore on island (another person survived, and a third was washed overboard and is officially missing)

\*n = 14.

*Hurricane Andrew – Continued*

Because there is no universally accepted definition of a hurricane-associated death, the cases listed in this report were determined to be hurricane-associated by each district ME office. As a result, each ME office may apply different criteria to determine whether a death resulted from the hurricane. In addition, other organizations that collect information on disaster-associated deaths might apply different criteria. These potential differences reinforce the need to develop a standard definition for disaster-associated deaths.

Since 1989, MEs and coroners have reported important information about deaths associated with several natural disasters, including Hurricane Hugo (1989) (2,3), the Loma Prieta earthquake (1989) (4), the Plainfield tornado in Illinois (1990) (5), and flash floods in Texas (1991). In addition to mortality surveillance, the State of Florida, with the assistance of CDC, is conducting a rapid damage assessment survey to determine the extent of injuries and loss of utilities and health services that resulted from Hurricane Andrew.

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**Syphilis – Ford County, Kansas, 1992**

In January 1992, the Ford County (Kansas) Health Department received a report of a pregnant woman with a positive serologic test for syphilis. Syphilis had not been reported in the county (1990 population: 27,463) since September 1989. As a result of the investigation summarized in this report, six additional persons with syphilis were identified by contact tracing.

Patients ranged in age from 15 to 21 years (median: 16 years); five were female, including two who were pregnant. All were residents of Ford County. All patients had positive serologic tests (i.e., Venereal Disease Research Laboratory/rapid plasma reagin and fluorescent treponemal antibody tests) for syphilis. Two patients were symptomatic; both had a rash consistent with secondary syphilis. Early latent syphilis was diagnosed in the other patients. Three patients were tested for human immunodeficiency virus; all were negative.

Two of the patients were in drug-abuse rehabilitation; these two were the only patients who reported use of crack cocaine. The primary patient was a male who traveled frequently to Wyandotte County, Kansas (in the Kansas City metropolitan area), which reported a 290% increase in early syphilis from 1990 (48 cases) through 1991 (187 cases). Although much of the increase in Wyandotte County has been associated with the use of crack cocaine, none of the patients in this investigation reported exchanging drugs or money for sex.

*Reported by: E Chipman, Ford County Health Dept, D Gamble, MD, Dodge City; J Johnson, MPH, P Lauber, A Mayer, A Pelletier, MD, Acting State Epidemiologist, Kansas Dept of Health and Environment. Div of Field Epidemiology, Epidemiology Program Office, CDC.*

*Syphilis – Continued*

**Editorial Note:** The cases of syphilis in Ford County, a rural area, reflect national trends for the occurrence of this problem and are of concern for three reasons. First, transmission of infection is occurring in a geographic area largely unaffected by the increase in syphilis (1,2). Until recently, rates of primary and secondary syphilis have been low in rural areas of the Midwest (1). Second, the incidence of syphilis is increasing among adolescents. From 1987 through 1991, the national incidence of primary and secondary syphilis for persons aged 15–19 years increased 40% (3). Third, exposure to syphilis and infection may be associated with drug use, particularly crack cocaine (1,4).

Because syphilis has been rare in rural areas of Kansas, some health-care workers in those areas may not be familiar with characteristics of this disease. In particular, physicians may need to increase their clinical suspicion for syphilis because risk factors for the disease are widespread. Screening for syphilis during pregnancy must remain a public health priority, and increased efforts are needed to educate adolescents about safer sex practices and substance-abuse prevention.

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*Effectiveness in Disease and Injury Prevention***Public Health Focus: Effectiveness of Smoking-Control Strategies – United States**

In 1990, approximately 46 million adults in the United States continued to smoke; however, more than 44 million persons were former smokers (1) who had reduced their risk for the leading causes of death in the United States (2). Smoking-cessation methods can be categorized as 1) self-help strategies (e.g., quitting abruptly and completely [“cold turkey”], using quitting manuals, or using nonprescription drugs) or 2) assisted strategies (e.g., smoking-cessation clinics, hypnosis, acupuncture, or nicotine gum or patch with counseling). This report summarizes information regarding the efficacy and cost-effectiveness of smoking-cessation strategies.

**Efficacy**

Approximately 90% of successful quitters have used a self-help quitting strategy, most by quitting abruptly (3). Those who used an assisted method (8%) were more likely to be women, be aged 45–64 years, have more than a high school education, have made more previous attempts to quit smoking, and have been heavier smokers (3). Twelve-month abstinence rates for persons using self-help methods have ranged from 8% to 25% (4), while cessation rates for persons who used smoking-cessation clinics have ranged from 20% to 40% (5). Fewer smokers use smoking-cessation

*Smoking-Control Strategies – Continued*

clinics than use self-help methods; however, clinics are more likely to attract heavy smokers (3).

Mass media campaigns also influence smoking behavior by changing awareness, knowledge, and attitudes of smokers (6). In addition, televised "self-help" clinics have been effective in changing behaviors of smokers, especially when coupled with a social support component (e.g., group discussion) (6). Effective mass media campaigns have been characterized by multiple and repeated messages (e.g., a series of public service announcements), widespread dissemination, and high saturation over a prolonged period.

Physician counseling is an important element in many smoking-cessation strategies. A brief and simple message from physician to patient can be effective in changing smoking behavior (7).

**Cost-Effectiveness**

Assessment of the American Lung Association's (ALA) self-help smoking-cessation program indicated that, overall, 12-month cessation rates were higher (18%) among groups with a maintenance component (i.e., relapse prevention) than among groups without a maintenance component (12%–15%). The cost per current abstainer at 12 months ranged from \$105 to \$116 in groups with a maintenance component, compared with \$126 to \$135 per abstainer in groups without a maintenance component (8).

Smoking-cessation programs designed for the Stanford Five City Project included 1) a smoking-cessation clinic, 2) an incentive-based quit-smoking contest, and 3) a self-help quit-smoking kit (9). The self-help kit was the most cost-effective program, and the smoking-cessation clinic was the least cost-effective. Costs per abstainer for each program ranged from \$235 to \$399 for the clinic, from \$129 to \$236 for the contest, and from \$22 to \$144 for the self-help quit-smoking kit.

Modeling of the cost of brief physician counseling on smoking cessation during a routine office visit per life-year saved was at least as cost-effective as other preventive medical practices (e.g., the treatment of mild to moderate hypertension and cholesterolemia) (10,11). In addition, nicotine gum, when used with physician counseling, enhanced the effectiveness of the intervention; the cost per life-year saved with this intervention ranged from \$4113 to \$6465 for men and from \$6880 to \$9473 for women (11).

*Reported by: Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC.*

**Editorial Note:** The findings described in this report suggest that wider dissemination of self-help materials, such as smoking-cessation booklets, hold the potential for assisting a substantial number of smokers who might not seek help in quitting smoking through more formal methods. In addition, the cost-effectiveness of smoking-cessation programs may be enhanced by targeting specific populations (e.g., smoking-cessation manuals tailored to pregnant women) and developing programs with a follow-up or maintenance component that use a combination of multiple interventions (12).

Physician intervention can be an effective strategy for smoking prevention and cessation. Physicians can counsel persons in high-risk groups, including pregnant women and adolescents whose other behaviors (e.g., alcohol use and poor school performance) indicate they are more likely to use tobacco (7). In 1990, approximately half of current smokers reported that they had ever been advised by their physicians

*Smoking-Control Strategies – Continued*

to quit or reduce their smoking (CDC, unpublished data, 1992). Counseling effectiveness can be increased by direct face-to-face advice and suggestions, setting of a target date for quitting, scheduled reinforcement, provision of self-help materials, referral to community programs, and drug therapy when used as an adjunct to other behavioral interventions. The U.S. Preventive Services Task Force concluded that smoking-cessation counseling should receive the highest priority as a preventive intervention (7) and recommended that physicians 1) obtain a complete history of tobacco use for all adolescent and adult patients and 2) offer counseling on a regular basis to all tobacco users.

Effective community-based tobacco-control programs, such as the National Cancer Institute's (NCI) Community Intervention Trial for Smoking Cessation and NCI and the American Cancer Society's American Stop Smoking Intervention Study, stimulate community involvement by identifying major community groups and organizations that can support interventions. Smoking-control activities in communities should encompass health-care providers, worksites, cessation resources and services, and public education.

The proportion of smokers who have quit has been consistently higher for males than for females (although the difference becomes minimal after controlling for other forms of tobacco use), for whites than for blacks, for older smokers than for younger smokers, and for college graduates than for persons with less than a high school education (3). Therefore, to reduce overall tobacco use, the U.S. Department of Health and Human Services has targeted several high-risk populations, including women, black adults, and persons with a high school education or less, for smoking-cessation programs (13). For example, the national health objectives for the year 2000 includes increasing smoking-cessation efforts for pregnant women so that at least 60% of women who smoke cigarettes at the time they become pregnant quit smoking early and for the duration of their pregnancy (objective 3.7) (13).

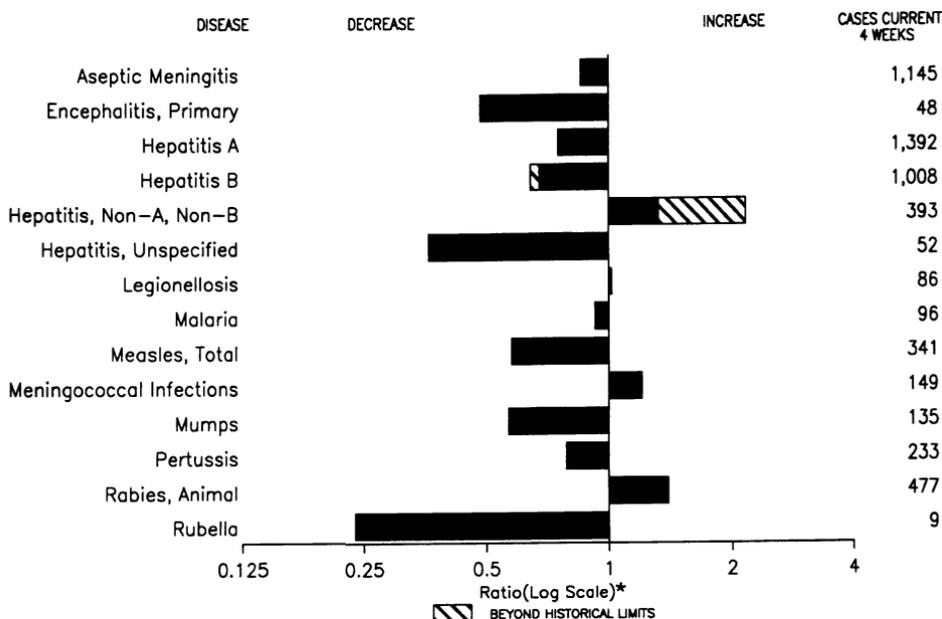
The achievement of long-term health and economic benefits of reducing the nation's overall smoking rate also requires intensive smoking-prevention efforts. In particular, each year, more than 1 million young persons start to smoke, adding an estimated \$10 billion during their lifetimes to the cost of health care in the United States (14). A multicomponent approach to prevent initiation among youths should be coupled with school-based tobacco-use prevention programs and include 1) mass media campaigns to target high-risk groups, 2) increased excise taxes on tobacco products, 3) increasing the minimum age for sale of tobacco products, 4) prohibiting the distribution of tobacco product samples to minors, 5) elimination or severe restriction of tobacco product advertising and promotion to which youth are likely to be exposed, 6) restricting the sale of tobacco products through vending machines, and 7) enforcing tobacco access laws for minors (13).

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*(Continued on page 653)*

**FIGURE I. Notifiable disease reports, comparison of 4-week totals ending August 29, 1992, with historical data — United States**



**TABLE I. Summary — cases of specified notifiable diseases, United States, cumulative, week ending August 29, 1992 (35th Week)**

	Cum. 1992		Cum. 1992
AIDS*	27,377	Measles: imported	106
Anthrax	-	indigenous	1,769
Botulism: Foodborne	10	Plague	6
Infant	35	Poliomyelitis, Paralytic†	-
Other	2	Psittacosis	57
Brucellosis	51	Rabies, human	-
Cholera	95	Syphilis, primary & secondary	22,692
Congenital rubella syndrome	8	Syphilis, congenital, age < 1 year‡	697
Diphtheria	4	Tetanus	15
Encephalitis, post-infectious	91	Toxic shock syndrome	166
Gonorrhea	324,399	Trichinosis	17
<i>Haemophilus influenzae</i> (invasive disease)	962	Tuberculosis	14,699
Hansen Disease	118	Tularemia	108
Leptospirosis	21	Typhoid fever	234
Lyme Disease	4,827	Typhus fever, tickborne (RMSF)	289

\*Updated monthly; last update August 1, 1992.

†Two cases of suspected poliomyelitis have been reported in 1992; six of the nine suspected cases with onset in 1991 were confirmed and 5 of the 8 suspected cases with onset in 1990 were confirmed, and all were vaccine associated.

‡Updates for first quarter 1992.

**TABLE II. Cases of selected notifiable diseases, United States, weeks ending August 29, 1992, and August 31, 1991 (35th Week)**

Reporting Area	AIDS*	Aseptic Meningitis	Encephalitis		Gonorrhea		Hepatitis (Viral), by type				Legionellosis	Lyme Disease
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
					Cum. 1992	Cum. 1992						
UNITED STATES	27,377	5,182	386	91	324,399	396,373	13,217	10,502	4,776	459	857	4,827
NEW ENGLAND	906	201	20	-	6,946	9,616	387	393	65	17	45	1,143
Maine	35	22	2	-	57	111	26	19	5	-	2	4
N.H.	30	9	2	-	91	154	28	25	16	1	4	28
Vt.	13	9	3	-	18	39	5	10	9	-	2	3
Mass.	492	97	10	-	2,532	4,222	190	308	30	16	27	122
R.I.	67	64	3	-	483	776	96	18	5	-	10	187
Conn.	269	-	-	-	3,765	4,314	42	13	-	-	-	799
MID. ATLANTIC	6,806	507	17	8	35,089	47,475	1,033	1,376	245	16	238	2,703
Upstate N.Y.	752	247	-	-	6,716	8,198	234	337	148	8	91	1,685
N.Y. City	3,901	96	4	1	12,143	18,516	436	266	4	-	3	9
N.J.	1,362	-	-	-	4,987	7,882	164	351	67	-	47	427
Pa.	791	164	13	7	11,243	12,879	199	422	26	8	117	582
E.N. CENTRAL	2,520	736	103	27	60,723	74,440	1,883	1,598	894	26	215	94
Ohio	454	206	30	2	18,603	22,832	291	154	64	4	93	39
Ind.	262	120	10	11	5,838	7,374	573	555	430	9	28	29
Ill.	1,155	149	39	6	19,097	22,261	369	180	57	4	14	6
Mich.	500	249	22	8	14,632	16,721	96	409	294	9	53	20
Wis.	149	12	2	-	2,553	5,252	554	300	49	-	27	-
W.N. CENTRAL	762	279	23	6	14,715	19,630	1,586	440	181	27	52	196
Minn.	138	30	5	-	1,847	1,995	475	51	13	2	4	86
Iowa	54	39	-	3	997	1,353	30	25	5	3	14	14
Mo.	387	127	8	-	8,260	11,946	590	297	141	20	18	71
N. Dak.	8	1	2	-	46	49	78	1	3	1	2	1
S. Dak.	6	8	-	1	120	231	191	4	-	-	-	1
Nebr.	34	11	3	2	8	1,268	116	16	7	1	12	10
Kans.	135	63	5	-	3,437	2,788	106	46	12	-	2	13
S. ATLANTIC	6,452	949	79	37	99,977	118,852	830	1,743	675	77	121	382
Del.	79	36	6	-	1,182	1,850	32	159	141	1	18	141
Md.	757	105	11	-	10,304	12,023	151	268	25	5	21	92
D.C.	423	16	1	-	4,328	6,422	13	56	250	-	7	2
Va.	392	156	24	9	10,864	11,903	75	135	27	30	11	80
W. Va.	34	16	13	-	614	809	6	41	1	18	-	7
N.C.	436	125	20	-	16,654	23,906	72	295	63	-	24	39
S.C.	221	16	-	-	7,460	9,714	19	39	-	1	16	1
Ga.	842	109	2	-	29,932	28,102	115	194	73	-	6	2
Fla.	3,268	370	2	28	18,639	24,123	347	556	95	22	18	18
E.S. CENTRAL	860	297	18	-	31,954	39,562	194	869	1,377	2	45	49
Ky.	128	103	10	-	3,249	4,014	52	62	3	-	19	18
Tenn.	265	59	4	-	9,563	13,916	86	712	1,362	-	20	24
Ala.	313	82	3	-	11,359	11,990	32	91	11	1	6	7
Miss.	154	53	1	-	7,783	9,642	24	4	1	1	-	-
W.S. CENTRAL	2,566	636	41	5	36,775	45,034	1,313	1,317	86	101	14	87
Ark.	127	7	7	-	5,034	5,515	74	53	7	4	-	10
La.	466	43	5	1	10,350	10,047	158	123	40	2	2	5
Okla.	147	-	3	2	3,658	4,646	139	143	21	3	7	21
Tex.	1,826	586	26	2	17,733	24,826	942	998	18	92	5	51
MOUNTAIN	788	180	17	4	8,168	8,404	1,933	494	178	38	67	11
Mont.	14	4	1	1	70	70	57	26	26	-	9	-
Idaho	19	21	-	-	73	97	45	62	-	1	4	2
Wyo.	2	1	1	-	33	64	7	4	14	-	1	1
Colo.	264	59	7	1	2,971	2,462	566	79	66	19	12	-
N. Mex.	66	12	3	1	609	723	199	140	18	7	2	2
Ariz.	254	52	2	-	2,855	3,077	784	106	21	6	23	-
Utah	54	5	3	1	221	214	214	11	20	5	2	6
Nev.	115	26	-	-	1,336	1,697	61	66	13	-	14	-
PACIFIC	5,717	1,397	68	4	30,052	33,360	4,058	2,272	1,075	155	60	162
Wash.	314	-	1	-	2,478	3,034	519	234	103	7	8	10
Oreg.	161	-	-	-	1,146	1,338	252	193	52	8	-	-
Calif.	5,146	1,327	63	3	25,628	27,929	3,110	1,821	751	132	51	151
Alaska	11	11	4	-	486	549	38	12	2	1	-	-
Hawaii	85	59	-	1	314	510	139	12	167	7	1	1
Guam	-	2	-	-	48	12	5	1	-	6	-	1
P.R.	877	123	1	-	151	399	34	302	144	16	1	-
V.I.	2	-	-	-	70	278	2	6	-	-	-	-
Amer. Samoa	-	-	-	-	31	32	1	1	-	-	-	-
C.N.M.I.	-	-	-	-	61	48	1	-	-	-	-	-

N: Not notifiable

U: Unavailable

C.N.M.I.: Commonwealth of the Northern Mariana Islands

\*Updated monthly; last update August 1, 1992.

**TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending August 29, 1992, and August 31, 1991 (35th Week)**

Reporting Area	Malaria		Measles (Rubeola)				Menin- gococcal Infections	Mumps		Pertussis			Rubella		
	Cum. 1992	1992	Indigenous		Imported*			Cum. 1991	Cum. 1992	1992	Cum. 1992	Cum. 1991	1992	Cum. 1992	Cum. 1991
			1992	Cum. 1992	1992	Cum. 1992									
UNITED STATES	618	30	1,769	-	106	8,444	1,569	34	1,819	62	1,331	1,680	2	133	1,096
NEW ENGLAND	34	-	51	-	8	71	93	2	14	10	124	228	-	6	4
Maine	1	-	2	-	1	2	8	-	-	2	7	48	-	1	-
N.H.	3	-	15	-	-	-	5	-	3	1	29	17	-	-	1
Vt.	-	-	-	-	-	5	4	-	2	2	5	4	-	-	2
Mass.	19	-	11	-	3	35	40	-	2	1	53	134	-	-	4
R.I.	4	-	23	-	-	2	1	-	-	-	-	-	-	-	1
Conn.	7	-	-	-	4	27	35	2	8	4	30	25	-	1	1
MID. ATLANTIC	165	-	173	-	13	4,578	172	1	114	3	99	161	-	16	563
Upstate N.Y.	25	-	81	-	4	399	84	1	53	3	34	84	-	11	537
N.Y. City	94	-	42	-	8	1,700	15	-	12	-	9	20	-	-	2
N.J.	24	-	45	-	1	1,023	25	-	9	-	16	14	-	2	2
Pa.	22	-	5	-	-	1,456	48	-	40	-	40	43	-	3	22
E.N. CENTRAL	41	-	26	-	14	81	233	4	243	2	128	331	-	8	182
Ohio	7	-	-	-	6	3	60	-	88	-	47	80	-	-	147
Ind.	11	-	20	-	-	2	36	1	8	2	21	58	-	-	2
Ill.	10	-	4	-	4	26	61	-	77	-	15	62	-	8	7
Mich.	11	-	2	-	2	41	57	3	61	-	8	25	-	-	25
Wis.	2	-	-	-	2	9	19	-	9	-	37	106	-	-	1
W.N. CENTRAL	32	-	6	-	8	44	70	-	60	4	120	123	-	5	17
Minn.	15	-	5	-	5	14	9	-	19	-	32	49	-	-	6
Iowa	2	-	-	-	3	15	7	-	10	-	3	13	-	1	6
Mo.	10	-	-	-	-	1	24	-	23	-	46	43	-	-	5
N. Dak.	1	-	-	-	-	-	1	-	2	-	12	2	-	-	-
S. Dak.	1	-	-	-	-	-	1	-	-	1	7	3	-	-	-
Nebr.	-	-	-	-	-	1	14	-	4	2	10	7	-	-	-
Kans.	3	-	1	-	-	13	14	-	2	1	10	6	-	4	-
S. ATLANTIC	119	-	120	-	11	455	325	16	699	12	111	178	-	15	8
Del.	5	-	3	-	-	21	2	-	5	2	6	-	-	-	-
Md.	32	-	9	-	7	174	27	1	61	-	18	46	-	6	1
D.C.	8	-	-	-	-	-	3	-	5	-	1	-	-	1	1
Va.	27	-	10	-	4	29	47	-	38	-	6	18	-	-	-
W. Va.	1	-	-	-	-	-	14	-	22	1	7	9	-	1	-
N.C.	8	-	25	-	-	41	102	-	181	-	21	25	-	-	2
S.C.	-	-	29	-	-	13	20	1	49	-	11	10	-	2	-
Ga.	5	-	-	-	-	15	42	14	70	6	14	33	-	-	-
Fla.	33	-	44	-	-	162	68	-	268	3	27	37	-	5	4
E.S. CENTRAL	14	-	445	-	18	4	97	-	45	-	22	60	-	1	100
Ky.	1	-	444	-	2	1	28	-	-	-	1	-	-	-	-
Tenn.	9	-	-	-	-	3	29	-	14	-	5	23	-	1	100
Ala.	4	-	-	-	-	-	29	-	10	-	13	33	-	-	-
Miss.	-	-	1	-	16	-	11	-	21	-	3	4	-	-	-
W.S. CENTRAL	18	30	834	-	1	182	119	8	309	2	45	45	-	-	5
Ark.	-	-	-	-	-	5	10	-	6	1	12	4	-	-	1
La.	1	-	-	-	-	-	25	-	19	1	6	12	-	-	-
Okla.	5	-	11	-	-	-	13	1	16	-	27	23	-	-	-
Tex.	12	30	823	-	1	177	71	7	268	-	-	6	-	-	4
MOUNTAIN	23	-	13	-	8	1,031	77	2	107	13	242	175	1	7	12
Mont.	-	-	-	-	-	-	14	-	2	-	3	2	-	-	-
Idaho	1	-	-	-	-	410	8	-	3	10	37	23	-	1	-
Wyo.	-	-	1	-	-	3	2	-	-	-	-	3	-	-	-
Colo.	5	-	9	-	7	6	13	1	16	-	26	90	-	1	2
N. Mex.	4	-	1	-	1	98	8	N	N	2	56	23	-	-	1
Ariz.	8	-	2	-	-	312	19	-	60	-	94	8	-	2	2
Utah	4	-	-	-	-	183	4	-	18	-	24	24	-	1	3
Nev.	1	-	-	-	-	19	9	1	8	1	2	2	1	2	4
PACIFIC	172	-	101	-	25	1,998	383	1	228	16	440	379	1	75	205
Wash.	12	-	-	-	10	61	62	-	9	13	136	94	-	6	8
Oreg.	11	-	4	-	1	71	53	N	N	-	24	53	-	3	2
Calif.	141	-	56	-	3	1,839	257	1	200	3	259	178	-	44	185
Alaska	1	-	8	-	1	3	6	-	1	-	5	12	-	-	1
Hawaii	7	-	33	-	10	24	5	-	18	-	16	42	1	22	9
Guam	1	U	10	U	-	-	-	U	8	U	-	-	U	1	-
P.R.	-	19	339	-	-	94	3	-	1	1	10	42	-	-	1
V.I.	-	-	-	-	-	2	-	-	17	-	-	-	-	-	-
Amer. Samoa	-	-	-	-	-	24	-	-	-	-	6	-	-	-	-
C.N.M.I.	-	-	1	-	1	-	-	-	-	-	1	-	-	-	-

\*For measles only, imported cases include both out-of-state and international importations.

N: Not notifiable U: Unavailable <sup>1</sup>International <sup>5</sup>Out-of-state

**TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending August 29, 1992, and August 31, 1991 (35th Week)**

Reporting Area	Syphilis (Primary & Secondary)		Toxic- shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1992	Cum. 1991	Cum. 1992	Cum. 1992	Cum. 1991	Cum. 1992	Cum. 1992	Cum. 1992	Cum. 1992
UNITED STATES	22,692	28,241	166	14,699	14,866	108	234	289	5,399
NEW ENGLAND	465	725	10	303	411	1	23	7	518
Maine	2	-	-	18	30	-	-	-	-
N.H.	38	12	6	3	5	-	1	-	5
Vt.	1	1	-	4	4	-	-	-	20
Mass.	229	346	3	149	187	1	14	3	6
R.I.	23	39	1	34	65	-	-	2	-
Conn.	172	327	-	95	120	-	8	2	487
MID. ATLANTIC	3,379	4,921	19	3,352	3,503	-	62	22	1,675
Upstate N.Y.	223	473	8	251	329	-	7	8	946
N.Y. City	1,827	2,438	-	2,069	2,130	-	25	3	8
N.J.	423	841	-	611	563	-	21	4	510
Pa.	906	1,169	11	421	481	-	9	7	211
E.N. CENTRAL	3,300	3,377	44	1,493	1,531	1	23	22	95
Ohio	528	457	14	232	221	-	3	12	10
Ind.	197	111	10	114	146	-	1	4	12
Ill.	1,436	1,539	5	745	811	1	16	2	16
Mich.	683	877	15	344	287	-	2	1	9
Wis.	456	393	-	58	66	-	1	3	48
W.N. CENTRAL	845	494	29	350	350	48	5	23	849
Minn.	59	47	6	96	66	-	2	-	140
Iowa	32	48	5	25	52	-	1	-	140
Mo.	659	351	6	159	147	33	1	18	13
N. Dak.	1	1	2	2	6	-	-	-	119
S. Dak.	-	1	-	18	26	11	-	1	95
Nebr.	1	11	3	16	13	2	1	-	8
Kans.	93	35	7	34	40	2	-	4	334
S. ATLANTIC	6,295	8,388	18	2,713	2,810	4	17	86	1,178
Del.	147	110	3	36	20	-	-	5	142
Md.	450	664	2	222	258	1	4	13	358
D.C.	285	524	-	84	126	-	1	1	13
Va.	468	642	2	169	226	2	1	12	209
W. Va.	13	21	1	69	46	-	1	4	27
N.C.	1,665	1,331	3	346	378	1	-	36	25
S.C.	870	1,057	1	276	275	-	1	6	113
Ga.	1,259	2,058	3	595	556	-	-	6	250
Fla.	1,138	1,981	3	916	925	-	9	3	41
E.S. CENTRAL	2,853	3,143	1	954	975	5	3	46	136
Ky.	97	66	-	268	236	1	-	6	53
Tenn.	752	1,037	1	245	257	4	-	37	29
Ala.	1,038	1,198	-	272	275	-	-	3	53
Miss.	966	842	-	169	207	-	3	-	1
W.S. CENTRAL	4,200	5,037	2	1,685	1,817	24	7	71	514
Ark.	559	478	-	126	158	16	-	10	29
La.	1,698	1,676	-	139	159	-	1	-	6
Okla.	222	128	1	110	118	8	-	61	253
Tex.	1,721	2,755	1	1,310	1,382	-	6	-	226
MOUNTAIN	249	415	15	390	413	20	2	7	117
Mont.	7	6	1	-	6	12	-	3	14
Idaho	1	3	1	16	4	-	1	1	-
Wyo.	3	7	-	-	3	1	-	1	23
Colo.	35	60	5	30	46	3	1	-	15
N. Mex.	29	24	2	53	55	4	-	1	5
Ariz.	126	265	2	192	224	-	-	-	53
Utah	7	5	4	57	30	-	-	1	2
NeV.	41	45	-	42	45	-	-	-	5
PACIFIC	1,106	1,741	28	3,459	3,056	5	92	5	317
Wash.	58	126	-	205	194	2	5	-	-
Oreg.	29	52	1	89	75	-	-	2	2
Calif.	1,008	1,555	27	2,962	2,597	1	82	3	302
Alaska	5	4	-	39	51	2	-	-	13
Hawaii	6	4	-	164	139	-	5	-	-
Guam	2	1	-	34	6	-	3	-	-
P.R.	215	306	-	135	157	-	1	-	31
V.I.	48	77	-	3	2	-	-	-	-
Amer. Samoa	-	-	-	-	2	-	1	-	-
C.N.M.I.	5	3	-	43	10	-	1	-	-

U: Unavailable

**TABLE III. Deaths in 121 U.S. cities,\* week ending August 29, 1992 (35th Week)**

Reporting Area	All Causes, By Age (Years)						P&I†	Total	Reporting Area	All Causes, By Age (Years)						P&I†	Total
	All Ages	≥65	45-64	25-44	1-24	<1				All Ages	≥65	45-64	25-44	1-24	<1		
NEW ENGLAND	551	380	101	39	18	13	40	S. ATLANTIC	1,215	728	242	155	41	49	59		
Boston, Mass.	147	97	28	12	4	6	13	Atlanta, Ga.	159	88	32	34	2	3	3		
Bridgeport, Conn.	32	23	3	2	2	2	2	Baltimore, Md.	264	168	52	25	9	10	23		
Cambridge, Mass.	14	11	2	1	-	-	-	Charlotte, N.C.	78	47	15	11	2	3	7		
Fall River, Mass.	27	23	4	-	-	-	-	Jacksonville, Fla.	122	73	28	13	5	3	3		
Hartford, Conn.	51	32	13	5	1	-	2	Miami, Fla.	U	U	U	U	U	U	U		
Lowell, Mass.	20	16	4	-	-	-	2	Norfolk, Va.	62	40	9	7	4	2	3		
Lynn, Mass.	12	8	4	-	-	-	-	Richmond, Va.	65	36	17	7	4	1	2		
New Bedford, Mass.	24	18	3	2	1	-	5	Savannah, Ga.	46	25	10	6	1	4	1		
New Haven, Conn.	57	42	6	5	3	1	3	St. Petersburg, Fla.	73	51	6	11	-	5	1		
Providence, R.I.	35	24	7	2	2	-	-	Tampa, Fla.	150	111	27	6	2	4	10		
Somerville, Mass.	4	1	-	2	1	-	-	Washington, D.C.	178	72	46	34	12	14	6		
Springfield, Mass.	42	21	11	6	1	3	5	Wilmington, Del.	18	17	-	1	-	-	-		
Waterbury, Conn.	32	25	6	-	1	-	3	E.S. CENTRAL	691	453	142	54	20	22	39		
Worcester, Mass.	54	39	10	2	2	1	5	Birmingham, Ala.	102	67	19	5	8	3	4		
MID. ATLANTIC	2,246	1,391	464	288	52	51	78	Chattanooga, Tenn.	64	46	13	4	-	1	3		
Albany, N.Y.	46	31	8	3	2	2	4	Knoxville, Tenn.	74	50	16	6	2	-	1		
Allentown, Pa.	21	17	4	-	-	-	1	Lexington, Ky.	51	33	14	1	1	2	3		
Buffalo, N.Y.	100	73	20	3	1	3	3	Memphis, Tenn.	188	128	32	18	5	5	14		
Camden, N.J.	29	17	8	2	1	1	1	Mobile, Ala.	42	29	8	2	1	2	6		
Elizabeth, N.J.	13	7	3	3	-	-	-	Montgomery, Ala.	52	36	8	4	-	4	-		
Erie, Pa.‡	46	32	9	5	-	-	6	Nashville, Tenn.	118	64	32	14	3	5	8		
Jersey City, N.J.	42	25	8	7	1	1	4	W.S. CENTRAL	1,374	824	272	165	60	53	70		
New York City, N.Y.	1,191	719	242	180	29	21	29	Austin, Tex.	81	49	15	13	4	-	6		
Newark, N.J.	63	33	13	13	3	1	3	Baton Rouge, La.	27	14	5	3	3	2	-		
Paterson, N.J.	31	13	9	4	-	-	5	Corpus Christi, Tex.	42	27	9	6	-	-	-		
Philadelphia, Pa.	311	182	68	46	9	6	13	Dallas, Tex.	188	96	40	20	10	22	3		
Pittsburgh, Pa.‡	52	33	12	4	2	1	2	El Paso, Tex.	62	41	14	1	5	1	4		
Reading, Pa.	26	20	4	2	-	-	2	Ft. Worth, Tex.	102	60	19	13	6	4	5		
Rochester, N.Y.	93	57	27	3	1	5	3	Houston, Tex.	378	207	84	60	14	13	31		
Schenectady, N.Y.	16	11	3	1	1	-	-	Little Rock, Ark.	72	51	15	4	2	-	6		
Scranton, Pa.‡	27	21	4	1	-	1	3	New Orleans, La.	80	55	7	12	5	1	-		
Syracuse, N.Y.	85	61	15	5	2	2	2	San Antonio, Tex.	196	131	40	17	4	4	6		
Trenton, N.J.	24	15	4	4	-	1	1	Shreveport, La.	50	34	6	5	2	3	4		
Utica, N.Y.	14	11	1	1	-	1	-	Tulsa, Okla.	96	59	18	11	5	3	5		
Yonkers, N.Y.	16	13	2	1	-	-	1	MOUNTAIN	810	527	153	83	23	24	47		
E.N. CENTRAL	1,859	1,112	352	201	123	71	81	Albuquerque, N.M.	96	59	21	12	1	3	1		
Akron, Ohio	68	52	12	1	3	-	-	Colo. Springs, Colo.	41	30	5	1	4	1	2		
Canton, Ohio	38	25	9	1	1	2	6	Denver, Colo.	106	72	13	16	3	2	6		
Chicago, Ill.	410	154	82	86	70	18	8	Las Vegas, Nev.	150	96	35	10	5	4	4		
Cincinnati, Ohio	104	70	15	9	4	6	10	Ogden, Utah	26	16	7	1	2	-	2		
Cleveland, Ohio	119	68	25	12	6	8	2	Phoenix, Ariz.	178	109	30	24	5	10	17		
Columbus, Ohio	103	71	17	9	5	1	2	Pueblo, Colo.	21	14	4	2	1	-	2		
Dayton, Ohio	99	72	15	8	2	2	4	Salt Lake City, Utah	80	57	10	10	1	2	4		
Detroit, Mich.	223	124	47	24	12	16	5	Tucson, Ariz.	112	74	28	7	1	2	9		
Evansville, Ind.	43	32	9	1	1	-	4	PACIFIC	1,745	1,124	292	220	61	39	99		
Fort Wayne, Ind.	53	37	11	3	1	1	-	Berkeley, Calif.	23	12	5	4	-	2	3		
Gary, Ind.	27	15	6	4	1	1	-	Fresno, Calif.	U	U	U	U	U	U	U		
Grand Rapids, Mich.	53	35	9	4	3	2	4	Glendale, Calif.	20	17	3	-	-	-	1		
Indianapolis, Ind.	170	106	32	21	4	7	12	Honolulu, Hawaii	92	62	16	8	3	3	5		
Madison, Wis.	43	29	10	3	1	-	3	Long Beach, Calif.	88	54	17	10	3	4	14		
Milwaukee, Wis.	118	87	21	6	2	2	7	Los Angeles, Calif.	447	298	46	71	19	7	18		
Peoria, Ill.	30	16	9	2	3	-	-	Pasadena, Calif.	24	16	3	4	1	-	3		
Rockford, Ill.	44	28	10	2	-	4	4	Portland, Ore.	135	93	20	10	7	4	3		
South Bend, Ind.	56	44	8	3	1	-	2	Sacramento, Calif.	135	86	23	19	5	1	10		
Toledo, Ohio	U	U	U	U	U	U	U	San Diego, Calif.	190	120	36	21	5	7	14		
Youngstown, Ohio	58	47	5	2	3	1	4	San Francisco, Calif.	165	81	40	37	4	3	1		
W.N. CENTRAL	636	449	106	52	17	12	25	San Jose, Calif.	138	84	31	14	4	5	13		
Des Moines, Iowa	54	37	11	5	-	1	2	Santa Cruz, Calif.	27	17	5	2	3	-	1		
Duluth, Minn.	21	18	2	1	-	-	1	Seattle, Wash.	141	93	27	14	5	2	7		
Kansas City, Kans.	25	23	-	-	2	-	-	Spokane, Wash.	46	33	8	2	2	1	3		
Kansas City, Mo.	111	82	21	7	-	1	7	Tacoma, Wash.	74	58	12	4	-	-	3		
Lincoln, Nebr.	44	35	4	4	1	-	3	TOTAL	11,127†	6,988	2,124	1,257	415	334	538		
Minneapolis, Minn.	102	63	25	9	4	1	5										
Omaha, Nebr.	78	56	10	6	3	3	4										
St. Louis, Mo.	115	76	18	12	6	3	-										
St. Paul, Minn.	33	23	7	1	1	1	2										
Wichita, Kans.	53	36	8	7	-	2	1										

\*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

†Pneumonia and influenza.

‡Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

§Total includes unknown ages.

U: Unavailable

*Smoking-Control Strategies – Continued*

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*Current Trends*

### **Reporting of Race and Ethnicity in the National Notifiable Diseases Surveillance System, 1990**

Since 1989, all state health departments have reported cases of infectious diseases to the National Notifiable Diseases Surveillance System (NNDSS)\* through the National Electronic Telecommunications System for Surveillance (NETSS) (1). Electronic reporting allows reporting of additional information, including demographic data, that can be used to help define the scope of public health problems for different groups and to develop appropriate preventive interventions. This report describes reporting through NNDSS of notifiable diseases by patients' race/ethnicity for 1990.

Final data for 36 notifiable diseases are reported to the NNDSS through NETSS (Table 1); data on other notifiable conditions are obtained from other surveillance systems. Collection of race/ethnicity data began in 10 states in 1985; the first year all states collected these data for an entire year was 1990. During 1990, racial/ethnic categories for reporting to the NNDSS were American Indian or Alaskan Native, Asian or Pacific Islander, black, Hispanic, and white (Table 2) (2).<sup>†</sup>

\*In the United States, reporting of communicable diseases by physicians and other health-care providers is mandated by state law or regulation. Under the leadership of the Council of State and Territorial Epidemiologists, reports of 49 diseases and conditions are forwarded to CDC for weekly publication in *MMWR* and annual publication in the *Summary of Notifiable Diseases*.

<sup>†</sup>In 1991, the categories and definitions used in reporting race/ethnicity to the NNDSS changed so that information on ethnicity (Hispanic origin or non-Hispanic origin) is collected separately from race.

*Race and Ethnicity – Continued*

Overall, during 1990, 53% of notifiable disease cases reported to the NNDSS were reported as individual case records (Table 1); the remaining cases of notifiable diseases were reported by states as numbers only, without demographic information. Exclusion of the number of varicella cases (nearly half the total cases reported), increases the reporting of individual case records to 95%.

Of the 195,682 cases reported as individual case records to the NNDSS during 1990, 135,115 (69%) included information on race/ethnicity (Table 1); reporting of race/ethnicity varied by disease and state (Tables 1 and 3). For six diseases of low frequency (i.e., less than 70 cases reported nationally in 1990), 90% of the individual case reports included information on race/ethnicity. Three diseases—measles, salmo-

**TABLE 1. Completeness of reporting of selected notifiable diseases as individual case records through the National Electronic Telecommunications System for Surveillance (NETSS) and of race/ethnicity, 1990**

Disease	Total* cases reported	Reported as individual case records		Completed race/ethnicity information	
		No.	(%)	Race/Ethnicity reported	% Individual case reports
Amebiasis	3,328	1,654	( 50)	1,077	65
Aseptic meningitis	11,852	11,663	( 98)	8,847	76
Botulism, food-borne	23	23	(100)	22	96
Botulism, infant	65	65	(100)	59	91
Botulism, other	4	4	(100)	3	75
Brucellosis	85	85	(100)	72	85
Diphtheria	4	4	(100)	3	75
Encephalitis, postinfectious	105	105	(100)	91	87
Encephalitis, primary	1,341	1,341	(100)	963	72
Hansen's disease	198	179	( 90)	159	89
Hepatitis A	31,441	31,441	(100)	26,457	84
Hepatitis B	21,102	21,102	(100)	16,532	78
Hepatitis, non-A, non-B	2,553	2,553	(100)	2,195	86
Hepatitis, unspecified	1,671	1,671	(100)	1,379	83
Legionellosis	1,370	1,370	(100)	1,106	81
Leptospirosis	77	77	(100)	52	68
Malaria	1,292	1,292	(100)	961	74
Measles†	27,786	27,234	( 98)	17,053	63
Meningococcal infections	2,451	2,451	(100)	2,033	83
Mumps	5,292	4,476	( 85)	3,384	76
Murine typhus	50	50	(100)	47	94
Pertussis	4,570	4,338	( 95)	2,676	62
Psittacosis	113	113	(100)	81	72
Rabies human	1	1	(100)	1	100
Rheumatic fever, acute	108	80	( 74)	60	75
Rocky Mountain spotted fever	651	651	(100)	568	87
Rubella	1,125	578	( 51)	435	75
Rubella, congenital syndrome	11	11	(100)	11	100
Salmonellosis	48,603	48,603	(100)	25,626	53
Shigellosis	27,077	21,374	( 79)	15,122	71
Tetanus	64	63	( 98)	59	94
Toxic shock syndrome	322	322	(100)	274	85
Trichinosis	129	129	(100)	32	25
Tularemia	152	152	(100)	110	72
Typhoid fever	552	552	(100)	430	78
Varicella	173,099	9,875	( 6)	7,135	72
<b>Total</b>	<b>368,667</b>	<b>195,682</b>	<b>( 53)</b>	<b>135,115</b>	<b>69</b>

\*Total cases reported include cases reported as individual case records and cases reported as aggregated data. Cases reported as aggregated data do not include demographic information.

†Indigenous and imported.

*Race and Ethnicity – Continued*

nellosis, and shigellosis—accounted for 65% of reports that did not include race/ethnicity. For example, of 48,603 cases of salmonellosis reported to the NNDSS as individual case records, 25,626 (53%) contained information on race/ethnicity. Race/ethnicity information was not included for 37% of measles and 29% of shigellosis case records. Lower levels of reporting of race/ethnicity information for salmonellosis and shigellosis may reflect reliance on lab reporting for these conditions. Race/ethnicity was indicated for 90% or more of individual case reports for measles, salmonellosis, and shigellosis by 23, 11, and five states, respectively.

*Reported by: State and territorial epidemiologists. Div of Surveillance and Epidemiology, Epidemiology Program Office, CDC.*

**Editorial Note:** The incidence of many infectious diseases varies among racial/ethnic groups (3,4); factors that may be associated with these variations may include access to preventive services, socioeconomic status, and culture. These differences in disease incidence have important implications for disease prevention and control activities. For example, in 1990 incidence rates for measles were highest for Hispanics and blacks and probably reflected lower levels of vaccination coverage among Hispanic and black children (5). Therefore, interventions were targeted to affected communities through radio public service announcements and the involvement of neighborhood institutions, including schools and churches.

Variations in completeness of reporting of race/ethnicity by disease may reflect differences in reporting sources and frequency of case investigation by state and local health departments. Information on race/ethnicity may be less likely to be reported to state health departments for diseases that are reported by laboratories and do not require further investigation by local or state health departments; this may account for the low level of reporting of race/ethnicity for salmonellosis. However, investigations of suspected measles cases are required to confirm that a reported case meets

**TABLE 2. Racial and ethnic categories\* for reporting to the National Notifiable Diseases Surveillance System before 1991 – United States**

Racial/Ethnic category	Definition
American Indian or Alaskan Native	A person having origins in any of the original peoples of North America, and who maintains cultural identification through tribal affiliation or community recognition.
Asian or Pacific Islander	A person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.
Black	A person having origins in any of the black racial groups of Africa.
Hispanic	A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture.
White	A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.

\*Race and ethnic standards for federal statistics and administrative reporting in the U.S. Department of Commerce's *Statistical Policy Handbook*.

## Race and Ethnicity — Continued

**TABLE 3. Completeness of reporting of selected notifiable diseases as individual case records via the National Electronic Telecommunications System for Surveillance (NETSS) and of race/ethnicity, by city and state, 1990**

City/State	Total* cases reported	Reported as individual case records		Completed race/ethnicity information	
		No.	(%)	Race/Ethnicity reported	% Individual case reports
Alabama	2,041	2,041	(100)	1,390	68
Alaska	630	630	(100)	561	89
Arizona	17,906	6,135	( 34)	5,587	91
Arkansas	1,738	1,721	( 99)	1,043	61
California	41,487	32,104	( 77)	15,609	49
Colorado	2,208	2,208	(100)	636	29
Connecticut	2,203	2,203	(100)	1,190	54
Delaware	785	785	(100)	491	63
District of Columbia	773	773	(100)	654	85
Florida	8,030	8,030	(100)	7,665	95
Georgia	4,360	4,360	(100)	2,785	64
Hawaii	3,107	1,081	( 35)	453	42
Idaho	638	638	(100)	270	42
Illinois	41,282	10,093	( 24)	7,589	75
Indiana	2,791	2,791	(100)	2,091	75
Iowa	6,983	998	( 14)	483	48
Kansas	4,658	4,658	(100)	4,098	88
Kentucky	4,542	1,553	( 34)	1,034	67
Louisiana	2,060	2,060	(100)	1,382	67
Maine	710	427	( 60)	427	100
Maryland	5,051	5,051	(100)	3,899	77
Massachusetts	10,394	4,497	( 43)	0	—
Michigan	43,161	5,137	( 12)	3,503	68
Minnesota	2,248	2,248	(100)	1,226	55
Mississippi	1,284	1,284	(100)	934	73
Missouri	13,649	3,058	( 22)	2,283	75
Montana	681	681	(100)	182	27
Nebraska	697	575	( 82)	307	53
Nevada	1,270	1,270	(100)	921	73
New Hampshire	2,860	561	( 20)	218	39
New Jersey	4,094	4,094	(100)	2,955	72
New Mexico	2,925	2,925	(100)	1,457	50
New York State	7,384	7,384	(100)	5,780	78
New York City	10,822	10,732	( 99)	7,915	74
North Carolina	4,925	4,925	(100)	4,845	98
North Dakota	985	985	(100)	344	35
Ohio	14,567	4,856	( 33)	2,991	62
Oklahoma	2,396	2,396	(100)	1,775	74
Oregon	2,528	2,528	(100)	1,780	70
Pennsylvania	8,119	7,211	( 89)	5,538	77
Rhode Island	3,508	674	( 19)	138	20
South Carolina	2,684	2,684	(100)	1,088	41
South Dakota	1,100	733	( 67)	733	100
Tennessee	5,142	2,590	( 50)	2,358	91
Texas	43,944	17,308	( 39)	15,663	90
Utah	1,768	1,540	( 87)	1,420	92
Vermont	341	341	(100)	0	—
Virginia	5,969	3,292	( 55)	2,195	67
Washington	3,976	3,975	(100)	3,350	84
West Virginia	6,922	557	( 8)	427	77
Wisconsin	4,077	4,077	(100)	3,236	79
Wyoming	264	224	( 85)	216	96
<b>Total</b>	<b>368,667</b>	<b>195,682</b>	<b>( 53)</b>	<b>135,115</b>	<b>69</b>

\*Total cases reported include cases reported as individual case records and cases reported as aggregated data. Cases reported as aggregated data do not include demographic information.

*Race and Ethnicity – Continued*

the surveillance case definition (6). The data missing for measles likely reflects the burden of undertaking such case investigations, as well as the reporting of individual case records during large outbreaks (5).

One of the national health objectives for the year 2000 is to develop and implement a national process to identify important data needs for disease prevention and health promotion, including data for racial/ethnic minorities, and to establish mechanisms to meet these needs (objective 22.4). Unlike socioeconomic status or cultural factors, data on race/ethnicity are collected in routine notifiable disease reports; until more direct information on socioeconomic status or cultural factors is available, public health officials must rely on indirect measures. Improved reporting and analyses of these data should facilitate more effective targeting of disease prevention efforts.

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Notices to Readers**National Childhood Lead Poisoning Prevention Conference**

CDC will sponsor the National Childhood Lead Poisoning Prevention Conference, December 7–9, 1992, in Atlanta. Representatives from state- and community-based childhood lead poisoning prevention programs, state and local government agencies, private and public organizations and institutions, academia, and child-health advocacy groups are invited.

The conference goal is to strengthen childhood lead-poisoning prevention programs and efforts nationwide through information exchange and discussion about prevention activities and scientific research. Conference topics will include 1) screening and follow-up, 2) managing the leaded environment, 3) community education and outreach, 4) epidemiology and surveillance, and 5) directions for the future.

Additional information and registration materials are available from Yvonne Chrimes, PACE Enterprises, Inc., 17 Executive Park Drive, Suite 200, Atlanta, GA 30329; telephone (404) 633-8610; fax (404) 633-8745.

**Epidemiology in Action Course**

CDC and Emory University will cosponsor a course designed for practicing state and local health department professionals. This course, "Epidemiology in Action," will be held at CDC November 9–20, 1992. It emphasizes the practical application of epidemiology to public health problems and will consist of lectures, workshops,

*Notices to Readers – Continued*

classroom exercises (including actual epidemiologic problems), roundtable discussions, and an on-site community survey. There is a tuition charge.

Applications must be received by September 11. Additional information and applications are available from Department PSB, Emory University, School of Public Health, 1599 Clifton Road, NE, Atlanta, GA 30329; telephone (404) 727-3485 or (404) 727-0199.

### **Publication of Annual Report on the Nation's Health**

CDC's National Center for Health Statistics has released *Health, United States, 1991* (1) to the President and Congress of the United States. The report examines the health of and health care for the nation, and includes a chartbook section on minority health, with detailed racial/ethnic data on major health indicators. The report also provides data on a wide range of health measures.

This volume, the 16th edition, includes the "1991 Prevention Profile," an integral part of the U.S. Department of Health and Human Services' national disease prevention and health promotion initiatives. The Prevention Profile examines the final status of the 1990 health objectives for the nation and highlights several components of the three broad national health objectives for the year 2000.

*Health, United States, 1991* is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 783-3238; stock no. 017-022-01156-5; price \$18.00. Tables (175) from the report are available on diskette in spread-sheet format to facilitate additional data analysis. Diskettes are available in the following formats: one 3.5 inch high-density diskette, price: \$21.00; two 5.25 inch double-density diskettes, price: \$26.00 per set; or one 5.25 inch high-density diskette, price: \$15.00.

#### *Reference*

1. NCHS. *Health, United States, 1991*. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1992; DHHS publication no. (PHS)92-1232.

### **Publication of Annual Vital Statistics Summary Report**

CDC's National Center for Health Statistics (NCHS) has released vital statistics (provisional data on the number and rate of births, marriages, divorces, and deaths) for 1991. Monthly estimates and rates are included for each vital event.

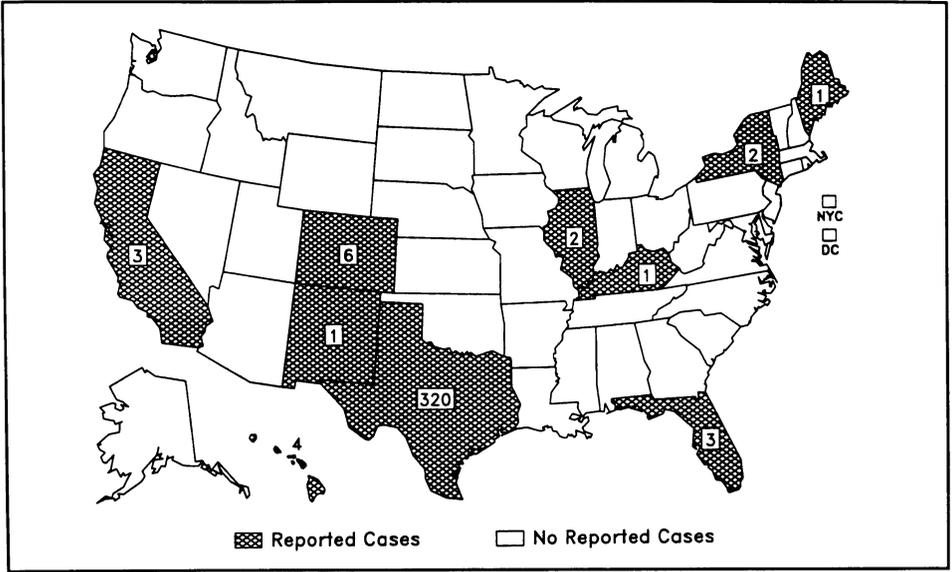
The report presents statistics on the expectation of life, major causes of death, deaths from human immunodeficiency virus infection, and infant mortality. Data by state of occurrence are shown for birth, marriage, divorce, death, and infant death.

The report, *Annual Summary of Births, Marriages, Divorces, and Deaths: United States, 1991* (1) is available free of charge from the Scientific and Technical Information Branch, Division of Data Services, NCHS, CDC, Room 1064, 6525 Belcrest Road, Hyattsville, MD 20782; telephone (301) 436-8500.

#### *Reference*

1. NCHS. Annual summary of births, marriages, divorces, and deaths: United States, 1991. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC 1992; DHHS publication no. (PHS)92-1120. (Monthly vital statistics report; vol 40, no. 13).

Reported cases of measles, by state – United States weeks 32–35, 1992



The *Morbidity and Mortality Weekly Report (MMWR)* Series is prepared by the Centers for Disease Control and is available on a paid subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; telephone (202) 783-3238.

The data in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. Inquiries about the *MMWR* Series, including material to be considered for publication, should be directed to: Editor, *MMWR* Series, Mailstop C-08, Centers for Disease Control, Atlanta, GA 30333; telephone (404) 332-4555.

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